



February 23, 2012

Duke Energy  
Miami Fort Generating Station  
11021 Brower Road  
North Bend, OH 45052

Attention: Ms. Tara Thomas  
Environmental Coordinator

Re: Results – **February 2012**  
Low-Level Mercury Sampling  
Miami Fort Generating Station  
North Bend, Ohio

In accordance with your request, URS prepared the following letter report transmitting low-level mercury test results for samples collected at the Miami Fort Generating Station located in North Bend, Ohio.

The scope of work involved the sampling of intake and discharge waters from the following sources and analysis of those samples for low-level mercury.

1. River Intake
2. Station 601 (WWT Influent)  
[Samples were collected at this station one detention time (approximately 14 hours as specified by Duke Energy) before samples collected at Outfall 608]
3. Outfall 608 (WWT Effluent)  
[Samples were collected at this outfall one detention time (approximately 14 hours as specified by Duke Energy) after samples collected at station 601]
4. Outfall 002 (Pond B Discharge)

Each sample was collected following the required Method 1669: *Sampling Ambient Water for Determination of Trace Metals at EPA Water Quality Criteria Levels* (Sampling Method) and analyzed by Method 1631. At the request of Duke Energy, a dissolved low-level mercury sample was collected by Method 1669 from Outfall 608 and analyzed by Method 1631. The collected dissolved sample was filtered at the laboratory utilizing 0.45 micron filtration. Also at the request of Duke Energy, total metal mercury sample aliquots (preserved) from Station 601 (Units 7 and 8) were used to have the laboratory pipet off and prepare the supernatant layer of the samples (leaving behind as much of the settled solids as possible) for analysis by Method 7470A.

Field staff from URS' Cincinnati office conducted the sampling and TestAmerica Laboratories Inc. located in North Canton, Ohio performed the analytical procedures. The analytical procedures included the analyses of a collected sample and duplicate sample (duplicates



Duke Energy  
February 23, 2012  
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(duplicates collected at Outfall 608 and Outfall 002), field blank (field blanks collected at the River Intake, Outfall 608, and Outfall 002), and trip blank.

The results from the **February 2 and 3, 2012** sampling event are presented in the attached Table 1. A copy of the laboratory report is enclosed with this letter.

--ooOoo--

URS is pleased to provide continued assistance to Duke Energy in the execution of their environmental monitoring requirements. If there are any questions regarding the content of this report, please do not hesitate to contact the undersigned.

Sincerely,

URS Corporation

A handwritten signature in blue ink, appearing to read "Michael A. Wagner", is positioned above the printed name.

Michael A. Wagner  
Project Manager

A handwritten signature in blue ink, appearing to read "Dennis P. Connair", is positioned above the printed name.

Dennis P. Connair, C.P.G.  
Principal

**TABLE 1**  
**ANALYTICAL RESULTS**  
**LOW-LEVEL MERCURY**  
**RIVER INTAKE, STATION 601, OUTFALL 608, AND OUTFALL 002 (POND B)**  
**DUKE ENERGY - MIAMI FORT STATION**  
**NORTH BEND, OHIO**

Sample ID	Date Sampled / Results (ng/L, parts per trillion)					
	1/3-4/2012	2/2-3/2012	3/x/2012	4/x/2012	5/x/2012	6/x/2012
River Intake	7.9	6.1				
Station 601 (7)	360,000	100,000				
Station 601 (7)*	570	6,000				
Station 601 (7)* [duplicate]	200	Not Collected				
Station 601 (8)	210,000	68,000				
Station 601 (8)*	420	5,300				
Station 601 (8)*[duplicate]	Not Collected	3,500				
Outfall 608	60	89				
Outfall 608 [duplicate]	65	85				
Outfall 608 [dissolved, 0.45 micron]	2.9	26				
APB-002	3.2	3.7				
APB-002 [duplicate]	3.3	3.5				
Field Blank (RI-FB)	<0.50	<0.50				
Field Blank (WWT-FB)	<0.50	<0.50				
Field Blank (AP-FB)	<0.50	<0.50				
Trip Blank	<0.50	<0.50				

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Samples collected by URS

Sampling times are noted within the associated laboratory report for each collected sample

Samples analyzed by TestAmerica of North Canton, Ohio

\* = Total mercury analysis utilizing Method 7470A [results converted from ug/L (parts per billion) to ng/L]. The aqueous layer of the sample was pipetted off and prepared, with care to leave behind as much of the settled solids as possible.

TABLE 1 (continued)

Sample ID	Date Sampled / Results (ng/L, parts per trillion)					
	7/x/2012	8/x/2012	9/x/2012	10/x/2012	11/x/2012	12/x/2012
River Intake						
Station 601 (7)						
Station 601 (7)*						
Station 601 (7)* [duplicate]						
Station 601 (8)						
Station 601 (8)*						
Station 601 (8)*[duplicate]						
Outfall 608						
Outfall 608 [duplicate]						
Outfall 608 [dissolved, 0.45 micron]						
APB-002						
APB-002 [duplicate]						
Field Blank (RI-FB)						
Field Blank (WWT-FB)						
Field Blank (AP-FB)						
Trip Blank						

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Samples collected by URS

Sampling times are noted within the associated laboratory report for each collected sample.

Samples analyzed by TestAmerica of North Canton, Ohio

\* = Total mercury analysis utilizing Method 7470A [results converted from ug/L (parts per billion) to ng/L]. The aqueous layer of the sample was pipetted off and prepared, with care to leave behind as much of the settled solids as possible.

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica North Canton

4101 Shuffel Street NW

North Canton, OH 44720

Tel: (330)497-9396

TestAmerica Job ID: 240-8306-1

Client Project/Site: DUKE MF LLHG - J12020125

For:

Duke Energy Corporation

139 East Fourth Street

ex 510

Cincinnati, Ohio 45202

Attn: Ms. Sue Wallace

*Denise Pohl*

Authorized for release by:

2/16/2012 4:46:27 PM

Denise Pohl

Project Manager II

[denise.pohl@testamericainc.com](mailto:denise.pohl@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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## Definitions/Glossary

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

### Qualifiers

#### Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Case Narrative

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

**Job ID: 240-8306-1**

**Laboratory: TestAmerica North Canton**

**Narrative**

### CASE NARRATIVE

**Client: Duke Energy Corporation**

**Project: DUKE MF LLHG - J12020125**

**Report Number: 240-8306-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

#### **RECEIPT**

The samples were received on 02/04/2012; the samples arrived in good condition. The temperature of the cooler at receipt was 14.9 C.

#### **DISSOLVED LOW LEVEL MERCURY**

Sample 608 WWT DISS (240-8306-11) was analyzed for dissolved low level mercury in accordance with EPA Method 1631E. The samples were prepared on 02/04/2012 and analyzed on 02/12/2012.

Sample 608 WWT DISS (240-8306-11)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

#### **TOTAL MERCURY**

Samples 601(8)WWT TOT (240-8306-1), 601(8)WWT TOT DUP (240-8306-2) and 601(7)WWT TOT (240-8306-4) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 02/07/2012 and analyzed on 02/08/2012.

Method(s) 7470A: Per client instructions, the aqueous layer of the sample was pipetted off and prepared for samples 601(7)WWT TOT, 601(8)WWT TOT, 601(8)WWT TOT DUP, with care to leave behind as much of the settled solids as possible.



## Case Narrative

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

### Job ID: 240-8306-1 (Continued)

#### Laboratory: TestAmerica North Canton (Continued)

No difficulties were encountered during the mercury analyses.

All quality control parameters were within the acceptance limits.

#### LOW LEVEL MERCURY

Samples 601(8)WWT (240-8306-3), 601(7)WWT (240-8306-5), RI FB (240-8306-6), RI (240-8306-7), TRIP BLANK (240-8306-8), 608 WWT FB (240-8306-9), 608 WWT (240-8306-10), 002 FB (240-8306-12), 002 (240-8306-13), 002 DUP (240-8306-14) and 608 WWT DUP (240-8306-15) were analyzed for Low Level Mercury in accordance with EPA Method 1631E. The samples were prepared on 02/06/2012 and analyzed on 02/13/2012.

Samples 601(8)WWT (240-8306-3)[100000X], 601(7)WWT (240-8306-5)[100000X], 608 WWT (240-8306-10)[40X] and 608 WWT DUP (240-8306-15)[40X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the mercury analyses.

All quality control parameters were within the acceptance limits.

## Method Summary

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

Method	Method Description	Protocol	Laboratory
1631E	Mercury, Low Level (CVAFS)	EPA	TAL NC
7470A	Mercury (CVAA)	SW846	TAL NC

### Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

TAL NC = TestAmerica North Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

## Sample Summary

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-8306-1	601(8)WWT TOT	Water	02/02/12 17:35	02/04/12 08:30
240-8306-2	601(8)WWT TOT DUP	Water	02/02/12 17:37	02/04/12 08:30
240-8306-3	601(8)WWT	Water	02/02/12 17:45	02/04/12 08:30
240-8306-4	601(7)WWT TOT	Water	02/02/12 18:05	02/04/12 08:30
240-8306-5	601(7)WWT	Water	02/02/12 18:10	02/04/12 08:30
240-8306-6	RI FB	Water	02/02/12 18:20	02/04/12 08:30
240-8306-7	RI	Water	02/02/12 18:25	02/04/12 08:30
240-8306-8	TRIP BLANK	Water	02/02/12 00:00	02/04/12 08:30
240-8306-9	608 WWT FB	Water	02/03/12 08:55	02/04/12 08:30
240-8306-10	608 WWT	Water	02/03/12 09:00	02/04/12 08:30
240-8306-11	608 WWT DISS	Water	02/03/12 09:05	02/04/12 08:30
240-8306-12	002 FB	Water	02/03/12 09:45	02/04/12 08:30
240-8306-13	002	Water	02/03/12 09:50	02/04/12 08:30
240-8306-14	002 DUP	Water	02/03/12 09:55	02/04/12 08:30
240-8306-15	608 WWT DUP	Water	02/03/12 09:10	02/04/12 08:30

## Detection Summary

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

### Client Sample ID: 601(8)WWT TOT

Lab Sample ID: 240-8306-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Mercury	5.3		0.20	ug/L	1		7470A	Total/NA

### Client Sample ID: 601(8)WWT TOT DUP

Lab Sample ID: 240-8306-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Mercury	3.5		0.20	ug/L	1		7470A	Total/NA

### Client Sample ID: 601(8)WWT

Lab Sample ID: 240-8306-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Mercury	68000		50000	ng/L	100000		1631E	Total/NA

### Client Sample ID: 601(7)WWT TOT

Lab Sample ID: 240-8306-4

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Mercury	6.0		0.20	ug/L	1		7470A	Total/NA

### Client Sample ID: 601(7)WWT

Lab Sample ID: 240-8306-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Mercury	100000		50000	ng/L	100000		1631E	Total/NA

### Client Sample ID: RI FB

Lab Sample ID: 240-8306-6

No Detections

### Client Sample ID: RI

Lab Sample ID: 240-8306-7

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Mercury	6.1		0.50	ng/L	1		1631E	Total/NA

### Client Sample ID: TRIP BLANK

Lab Sample ID: 240-8306-8

No Detections

### Client Sample ID: 608 WWT FB

Lab Sample ID: 240-8306-9

No Detections

### Client Sample ID: 608 WWT

Lab Sample ID: 240-8306-10

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Mercury	89		20	ng/L	40		1631E	Total/NA

### Client Sample ID: 608 WWT DISS

Lab Sample ID: 240-8306-11

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Mercury	26		5.0	ng/L	10		1631E	Dissolved

### Client Sample ID: 002 FB

Lab Sample ID: 240-8306-12

No Detections

## Detection Summary

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

### Client Sample ID: 002

### Lab Sample ID: 240-8306-13

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Mercury	3.7		0.50	ng/L	1		1631E	Total/NA

### Client Sample ID: 002 DUP

### Lab Sample ID: 240-8306-14

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Mercury	3.5		0.50	ng/L	1		1631E	Total/NA

### Client Sample ID: 608 WWT DUP

### Lab Sample ID: 240-8306-15

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Mercury	85		20	ng/L	40		1631E	Total/NA

## Client Sample Results

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

**Client Sample ID: 601(8)WWT TOT**

**Lab Sample ID: 240-8306-1**

**Date Collected: 02/02/12 17:35**

**Matrix: Water**

**Date Received: 02/04/12 08:30**

**Method: 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	5.3		0.20	ug/L		02/07/12 12:20	02/08/12 15:06	1

## Client Sample Results

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

**Client Sample ID: 601(8)WWT TOT DUP**

**Lab Sample ID: 240-8306-2**

**Date Collected: 02/02/12 17:37**

**Matrix: Water**

**Date Received: 02/04/12 08:30**

**Method: 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	3.5		0.20	ug/L		02/07/12 12:20	02/08/12 15:09	1

## Client Sample Results

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

**Client Sample ID: 601(8)WWT**

**Lab Sample ID: 240-8306-3**

**Date Collected: 02/02/12 17:45**

**Matrix: Water**

**Date Received: 02/04/12 08:30**

**Method: 1631E - Mercury, Low Level (CVAFS)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	68000		50000	ng/L		02/06/12 14:00	02/13/12 13:54	100000



## Client Sample Results

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

**Client Sample ID: 601(7)WWT TOT**

**Lab Sample ID: 240-8306-4**

**Date Collected: 02/02/12 18:05**

**Matrix: Water**

**Date Received: 02/04/12 08:30**

**Method: 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	6.0		0.20	ug/L		02/07/12 12:20	02/08/12 15:11	1

## Client Sample Results

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

**Client Sample ID: 601(7)WWT**

**Lab Sample ID: 240-8306-5**

**Date Collected: 02/02/12 18:10**

**Matrix: Water**

**Date Received: 02/04/12 08:30**

**Method: 1631E - Mercury, Low Level (CVAFS)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	100000		50000	ng/L		02/06/12 14:00	02/13/12 14:03	100000

## Client Sample Results

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

**Client Sample ID: RI FB**

**Date Collected: 02/02/12 18:20**

**Date Received: 02/04/12 08:30**

**Lab Sample ID: 240-8306-6**

**Matrix: Water**

**Method: 1631E - Mercury, Low Level (CVAFS)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.50	U	0.50	ng/L		02/06/12 14:00	02/13/12 15:55	1

## Client Sample Results

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

**Client Sample ID: RI**

**Date Collected: 02/02/12 18:25**

**Date Received: 02/04/12 08:30**

**Lab Sample ID: 240-8306-7**

**Matrix: Water**

**Method: 1631E - Mercury, Low Level (CVAFS)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	6.1		0.50	ng/L		02/06/12 14:00	02/13/12 14:11	1

## Client Sample Results

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 240-8306-8**

**Date Collected: 02/02/12 00:00**

**Matrix: Water**

**Date Received: 02/04/12 08:30**

**Method: 1631E - Mercury, Low Level (CVAFS)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.50	U	0.50	ng/L		02/06/12 14:00	02/13/12 16:04	1

## Client Sample Results

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

**Client Sample ID: 608 WWT FB**

**Lab Sample ID: 240-8306-9**

**Date Collected: 02/03/12 08:55**

**Matrix: Water**

**Date Received: 02/04/12 08:30**

**Method: 1631E - Mercury, Low Level (CVAFS)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.50	U	0.50	ng/L		02/06/12 14:00	02/13/12 15:28	1

## Client Sample Results

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

**Client Sample ID: 608 WWT**

**Lab Sample ID: 240-8306-10**

**Date Collected: 02/03/12 09:00**

**Matrix: Water**

**Date Received: 02/04/12 08:30**

**Method: 1631E - Mercury, Low Level (CVAFS)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	89		20	ng/L		02/06/12 14:00	02/13/12 14:20	40

## Client Sample Results

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

**Client Sample ID: 608 WWT DISS**

**Lab Sample ID: 240-8306-11**

**Date Collected: 02/03/12 09:05**

**Matrix: Water**

**Date Received: 02/04/12 08:30**

**Method: 1631E - Mercury, Low Level (CVAFS) - Dissolved**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	26		5.0	ng/L		02/04/12 17:30	02/12/12 18:05	10



## Client Sample Results

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

**Client Sample ID: 002 FB**

**Date Collected: 02/03/12 09:45**

**Date Received: 02/04/12 08:30**

**Lab Sample ID: 240-8306-12**

**Matrix: Water**

**Method: 1631E - Mercury, Low Level (CVAFS)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.50	U	0.50	ng/L		02/06/12 14:00	02/13/12 15:47	1

## Client Sample Results

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

**Client Sample ID: 002**

**Date Collected: 02/03/12 09:50**

**Date Received: 02/04/12 08:30**

**Lab Sample ID: 240-8306-13**

**Matrix: Water**

**Method: 1631E - Mercury, Low Level (CVAFS)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	3.7		0.50	ng/L		02/06/12 14:00	02/13/12 14:28	1

## Client Sample Results

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

**Client Sample ID: 002 DUP**

**Date Collected: 02/03/12 09:55**

**Date Received: 02/04/12 08:30**

**Lab Sample ID: 240-8306-14**

**Matrix: Water**

**Method: 1631E - Mercury, Low Level (CVAFS)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	3.5		0.50	ng/L		02/06/12 14:00	02/13/12 14:37	1

## Client Sample Results

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

**Client Sample ID: 608 WWT DUP**

**Lab Sample ID: 240-8306-15**

**Date Collected: 02/03/12 09:10**

**Matrix: Water**

**Date Received: 02/04/12 08:30**

**Method: 1631E - Mercury, Low Level (CVAFS)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	85		20	ng/L		02/06/12 14:00	02/13/12 14:45	40

# QC Sample Results

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

## Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 240-32862/1-A

Matrix: Water

Analysis Batch: 34121

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32862

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.50	U	0.50	ng/L		02/04/12 17:30	02/12/12 15:02	1

Lab Sample ID: LCS 240-32862/2-A

Matrix: Water

Analysis Batch: 34121

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32862

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	5.06		ng/L		101	77 - 123

Lab Sample ID: MB 240-33037/1-A

Matrix: Water

Analysis Batch: 34130

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33037

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.50	U	0.50	ng/L		02/06/12 14:00	02/13/12 16:38	1

Lab Sample ID: LCS 240-33037/2-A

Matrix: Water

Analysis Batch: 34130

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33037

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	4.20		ng/L		84	77 - 123

Lab Sample ID: PB 240-32853/1-B PB

Matrix: Water

Analysis Batch: 34121

Client Sample ID: Method Blank

Prep Type: Dissolved

Prep Batch: 32862

Analyte	PB Result	PB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.50	U	0.50	ng/L		02/04/12 17:30	02/12/12 17:39	1

## Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-32987/1-A

Matrix: Water

Analysis Batch: 33248

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32987

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	ug/L		02/07/12 12:20	02/08/12 14:23	1

Lab Sample ID: LCS 240-32987/2-A

Matrix: Water

Analysis Batch: 33248

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32987

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	4.09		ug/L		82	81 - 123

# QC Association Summary

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

## Metals

### Prep Batch: 32862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-8306-11	608 WWT DISS	Dissolved	Water	1631E	
LCS 240-32862/2-A	Lab Control Sample	Total/NA	Water	1631E	
MB 240-32862/1-A	Method Blank	Total/NA	Water	1631E	
PB 240-32853/1-B PB	Method Blank	Dissolved	Water	1631E	

### Prep Batch: 32987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-8306-1	601(8)WWT TOT	Total/NA	Water	7470A	
240-8306-2	601(8)WWT TOT DUP	Total/NA	Water	7470A	
240-8306-4	601(7)WWT TOT	Total/NA	Water	7470A	
LCS 240-32987/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 240-32987/1-A	Method Blank	Total/NA	Water	7470A	

### Prep Batch: 33037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-8306-3	601(8)WWT	Total/NA	Water	1631E	
240-8306-5	601(7)WWT	Total/NA	Water	1631E	
240-8306-6	RI FB	Total/NA	Water	1631E	
240-8306-7	RI	Total/NA	Water	1631E	
240-8306-8	TRIP BLANK	Total/NA	Water	1631E	
240-8306-9	608 WWT FB	Total/NA	Water	1631E	
240-8306-10	608 WWT	Total/NA	Water	1631E	
240-8306-12	002 FB	Total/NA	Water	1631E	
240-8306-13	002	Total/NA	Water	1631E	
240-8306-14	002 DUP	Total/NA	Water	1631E	
240-8306-15	608 WWT DUP	Total/NA	Water	1631E	
LCS 240-33037/2-A	Lab Control Sample	Total/NA	Water	1631E	
MB 240-33037/1-A	Method Blank	Total/NA	Water	1631E	

### Analysis Batch: 33248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-8306-1	601(8)WWT TOT	Total/NA	Water	7470A	32987
240-8306-2	601(8)WWT TOT DUP	Total/NA	Water	7470A	32987
240-8306-4	601(7)WWT TOT	Total/NA	Water	7470A	32987
LCS 240-32987/2-A	Lab Control Sample	Total/NA	Water	7470A	32987
MB 240-32987/1-A	Method Blank	Total/NA	Water	7470A	32987

### Analysis Batch: 34121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-8306-11	608 WWT DISS	Dissolved	Water	1631E	32862
LCS 240-32862/2-A	Lab Control Sample	Total/NA	Water	1631E	32862
MB 240-32862/1-A	Method Blank	Total/NA	Water	1631E	32862
PB 240-32853/1-B PB	Method Blank	Dissolved	Water	1631E	32862

### Analysis Batch: 34130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-8306-3	601(8)WWT	Total/NA	Water	1631E	33037
240-8306-5	601(7)WWT	Total/NA	Water	1631E	33037
240-8306-6	RI FB	Total/NA	Water	1631E	33037
240-8306-7	RI	Total/NA	Water	1631E	33037
240-8306-8	TRIP BLANK	Total/NA	Water	1631E	33037
240-8306-9	608 WWT FB	Total/NA	Water	1631E	33037

## QC Association Summary

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

### Metals (Continued)

#### Analysis Batch: 34130 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-8306-10	608 WWT	Total/NA	Water	1631E	33037
240-8306-12	002 FB	Total/NA	Water	1631E	33037
240-8306-13	002	Total/NA	Water	1631E	33037
240-8306-14	002 DUP	Total/NA	Water	1631E	33037
240-8306-15	608 WWT DUP	Total/NA	Water	1631E	33037
LCS 240-33037/2-A	Lab Control Sample	Total/NA	Water	1631E	33037
MB 240-33037/1-A	Method Blank	Total/NA	Water	1631E	33037

# Lab Chronicle

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

**Client Sample ID: 601(8)WWT TOT**

Date Collected: 02/02/12 17:35

Date Received: 02/04/12 08:30

**Lab Sample ID: 240-8306-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			32987	02/07/12 12:20	AS	TAL NC
Total/NA	Analysis	7470A		1	33248	02/08/12 15:06	BD	TAL NC

**Client Sample ID: 601(8)WWT TOT DUP**

Date Collected: 02/02/12 17:37

Date Received: 02/04/12 08:30

**Lab Sample ID: 240-8306-2**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			32987	02/07/12 12:20	AS	TAL NC
Total/NA	Analysis	7470A		1	33248	02/08/12 15:09	BD	TAL NC

**Client Sample ID: 601(8)WWT**

Date Collected: 02/02/12 17:45

Date Received: 02/04/12 08:30

**Lab Sample ID: 240-8306-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			33037	02/06/12 14:00	LM	TAL NC
Total/NA	Analysis	1631E		100000	34130	02/13/12 13:54	CJ	TAL NC

**Client Sample ID: 601(7)WWT TOT**

Date Collected: 02/02/12 18:05

Date Received: 02/04/12 08:30

**Lab Sample ID: 240-8306-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			32987	02/07/12 12:20	AS	TAL NC
Total/NA	Analysis	7470A		1	33248	02/08/12 15:11	BD	TAL NC

**Client Sample ID: 601(7)WWT**

Date Collected: 02/02/12 18:10

Date Received: 02/04/12 08:30

**Lab Sample ID: 240-8306-5**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			33037	02/06/12 14:00	LM	TAL NC
Total/NA	Analysis	1631E		100000	34130	02/13/12 14:03	CJ	TAL NC

**Client Sample ID: RI FB**

Date Collected: 02/02/12 18:20

Date Received: 02/04/12 08:30

**Lab Sample ID: 240-8306-6**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			33037	02/06/12 14:00	LM	TAL NC
Total/NA	Analysis	1631E		1	34130	02/13/12 15:55	CJ	TAL NC



# Lab Chronicle

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

## Client Sample ID: RI

Date Collected: 02/02/12 18:25

Date Received: 02/04/12 08:30

## Lab Sample ID: 240-8306-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			33037	02/06/12 14:00	LM	TAL NC
Total/NA	Analysis	1631E		1	34130	02/13/12 14:11	CJ	TAL NC

## Client Sample ID: TRIP BLANK

Date Collected: 02/02/12 00:00

Date Received: 02/04/12 08:30

## Lab Sample ID: 240-8306-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			33037	02/06/12 14:00	LM	TAL NC
Total/NA	Analysis	1631E		1	34130	02/13/12 16:04	CJ	TAL NC

## Client Sample ID: 608 WWT FB

Date Collected: 02/03/12 08:55

Date Received: 02/04/12 08:30

## Lab Sample ID: 240-8306-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			33037	02/06/12 14:00	LM	TAL NC
Total/NA	Analysis	1631E		1	34130	02/13/12 15:28	CJ	TAL NC

## Client Sample ID: 608 WWT

Date Collected: 02/03/12 09:00

Date Received: 02/04/12 08:30

## Lab Sample ID: 240-8306-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			33037	02/06/12 14:00	LM	TAL NC
Total/NA	Analysis	1631E		40	34130	02/13/12 14:20	CJ	TAL NC

## Client Sample ID: 608 WWT DISS

Date Collected: 02/03/12 09:05

Date Received: 02/04/12 08:30

## Lab Sample ID: 240-8306-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	1631E			32862	02/04/12 17:30	LM	TAL NC
Dissolved	Analysis	1631E		10	34121	02/12/12 18:05	CJ	TAL NC

## Client Sample ID: 002 FB

Date Collected: 02/03/12 09:45

Date Received: 02/04/12 08:30

## Lab Sample ID: 240-8306-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			33037	02/06/12 14:00	LM	TAL NC
Total/NA	Analysis	1631E		1	34130	02/13/12 15:47	CJ	TAL NC

# Lab Chronicle

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

## Client Sample ID: 002

Lab Sample ID: 240-8306-13

Date Collected: 02/03/12 09:50

Matrix: Water

Date Received: 02/04/12 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			33037	02/06/12 14:00	LM	TAL NC
Total/NA	Analysis	1631E		1	34130	02/13/12 14:28	CJ	TAL NC

## Client Sample ID: 002 DUP

Lab Sample ID: 240-8306-14

Date Collected: 02/03/12 09:55

Matrix: Water

Date Received: 02/04/12 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			33037	02/06/12 14:00	LM	TAL NC
Total/NA	Analysis	1631E		1	34130	02/13/12 14:37	CJ	TAL NC

## Client Sample ID: 608 WWT DUP

Lab Sample ID: 240-8306-15

Date Collected: 02/03/12 09:10

Matrix: Water

Date Received: 02/04/12 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1631E			33037	02/06/12 14:00	LM	TAL NC
Total/NA	Analysis	1631E		40	34130	02/13/12 14:45	CJ	TAL NC

### Laboratory References:

TAL NC = TestAmerica North Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

## Certification Summary

Client: Duke Energy Corporation  
Project/Site: DUKE MF LLHG - J12020125

TestAmerica Job ID: 240-8306-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica North Canton	ACCLASS	DoD ELAP		ADE-1437
TestAmerica North Canton	California	NELAC	9	01144CA
TestAmerica North Canton	Connecticut	State Program	1	PH-0590
TestAmerica North Canton	Florida	NELAC	4	E87225
TestAmerica North Canton	Georgia	Georgia EPD	4	N/A
TestAmerica North Canton	Illinois	NELAC	5	200004
TestAmerica North Canton	Kansas	NELAC	7	E-10336
TestAmerica North Canton	Kentucky	State Program	4	58
TestAmerica North Canton	Minnesota	NELAC	5	039-999-348
TestAmerica North Canton	Nevada	State Program	9	OH-000482008A
TestAmerica North Canton	New Jersey	NELAC	2	OH001
TestAmerica North Canton	New York	NELAC	2	10975
TestAmerica North Canton	Ohio	OVAP	5	CL0024
TestAmerica North Canton	Pennsylvania	NELAC	3	68-00340
TestAmerica North Canton	USDA	USDA		P330-11-00328
TestAmerica North Canton	Virginia	NELAC Secondary AB	3	460175
TestAmerica North Canton	Washington	State Program	10	C971
TestAmerica North Canton	West Virginia	West Virginia DEP	3	210
TestAmerica North Canton	Wisconsin	State Program	5	999518190

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

**Chain of Custody Record**

TestAmerica Laboratory location: West Canton OH Regulatory program: ☐ DW ☒ NPDES ☐ RCRA ☐ Other

<b>Client Contact</b> Company Name: <u>Duke Energy</u> Address: <u>M. Am. Forest Station</u> City/State/Zip: <u>N. Bend, OH</u> Phone: <u></u>		<b>Client Project Manager:</b> M. Wagner (URS) Telephone: <u>513-651-3440</u> Email: <u>mike.wagner@urs.com</u>		<b>Site Contact:</b> Tom Thomas Telephone: <u></u>		<b>Lab Contact:</b> Denise Pohl Telephone: <u></u>		<b>TestAmerica Laboratories, Inc.</b> COC No: <u>030654</u> 1 of 2 COCs	
<b>Project Name:</b> <u>Duke MF LCHg</u> <b>Project Number:</b> <u>44949873 14950516</u>		<b>Analysis Turnaround Time (in BUS days)</b> TAT if different from below: <u>3x</u> <input type="checkbox"/> 3 weeks <input checked="" type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		<b>Analyses</b> (181) LCHg (1631) TOT Hg		For lab use only Walk-in client <input type="checkbox"/> Lab pickup <input type="checkbox"/> Lab sampling <input type="checkbox"/> Job/SDG No: <u></u>		Sample Specific Notes / Special Instructions:	
<b>PO#</b> 601 (8) LWT TOT 601 (8) LWT TOT Dup 601 (8) LWT 601 (7) LWT TOT 601 (7) LWT RI FB RI TRIP BLANK 608 LWT FB 608 LWT		<b>Matrix</b> Air <input type="checkbox"/> Solid <input type="checkbox"/> Sediment <input type="checkbox"/> Aqueous <input type="checkbox"/> Other: <u></u>		<b>Containers &amp; Preservatives:</b> H2SO4 <input type="checkbox"/> HNO3 <input type="checkbox"/> HCl <input type="checkbox"/> NaOH <input type="checkbox"/> ZnAc <input type="checkbox"/> NaOH <input type="checkbox"/> Uprres <input type="checkbox"/> Other: <u></u>		Filtered Sample (Y/N) <u>N</u> Composite C/Grab <u>G</u>		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For <u>Months</u>	
<b>Sample Identification</b> Sample Date: <u>2-2-12</u> Sample Time: <u>1735</u> Sample Date: <u>2-3-12</u> Sample Time: <u>0555</u> Sample Date: <u>2-3-12</u> Sample Time: <u>0900</u>		<b>Method of Shipment/Carrier:</b> Shipping/Tracking No: <u></u>		<b>Sample Disposal</b> <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For <u>Months</u>		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Special Instructions/QC Requirements & Comments: <u>* POTENTIALLY ELEVATED Hg</u>	
<b>Relinquished by:</b> <u>[Signature]</u> Relinquished by: <u>URS</u> Relinquished by: <u>TestAmerica</u> Relinquished by: <u></u>		Date/Time: <u>2/2/12 1230</u> Date/Time: <u>2/3/12 1345</u> Date/Time: <u></u>		Company: <u>TestAmerica</u> Company: <u>TestAmerica</u> Company: <u>TAWC</u>		Date/Time: <u>2/3/12/1230</u> Date/Time: <u></u> Date/Time: <u>2/12/12 830 AM</u>		TAL 0018-1 (04/10)	

# Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: plumbh-Graben, OH  
 Regulatory program: ☐ DW ☒ NPDES ☐ RCRA ☐ Other

<b>Client Contact</b> Company Name: <u>Duke Energy</u> Address: <u>Mr. M. F. Station</u> City/State/Zip: <u>N. Beal OH</u> Phone: <u></u>		<b>Client Project Manager:</b> Name: <u>Mike Wagner (UE S)</u> Telephone: <u>513-651-3940</u> Email: <u>Mike.Wagner@ue.com</u>		<b>Site Contact:</b> Name: <u>Tara Thomas</u> Telephone: <u></u>		<b>Lab Contact:</b> Name: <u>Denise Pohl</u> Telephone: <u></u>		<b>TestAmerica Laboratories, Inc.</b> COC No: <u>2 of 2</u> COCs	
<b>Project Information</b> Project Name: <u>Duke MF Well</u> Project Number: <u>14949878</u> P.O.#: <u>14950516</u>		<b>Analysis Turnaround Time</b> TAT if different from below: <u></u> <input type="checkbox"/> 3 weeks <input checked="" type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		<b>Containers &amp; Preservatives</b> Matrix: <u></u> Other: <u></u> H2SO4 <u></u> HNO3 <u></u> HCl <u></u> NaOH <u></u> ZnAc <u></u> Unpres <u></u> Other: <u></u>		<b>Analyses</b> For Lab use only: Walk-in client <u></u> Lab pickup <u></u> Lab sampling <u></u> Job/SDG No: <u></u>		<b>Sample Specific Notes / Special Instructions:</b> <u></u>	
<b>Sample Identification</b> Sample Date: <u>2/3/12</u> Sample Time: <u>0910</u> Sample ID: <u>0945</u> Sample ID: <u>0950</u> Sample ID: <u>0955</u> Sample ID: <u>0910</u>		<b>Matrix</b> Air <u>X</u> Sediment <u>X</u> Solid <u>X</u> Aqueous <u>X</u> Other: <u></u>		<b>Filtered Sample (Y/N)</b> Composite C / Grab G <u>X</u> Filtered Sample (Y/N) <u>X</u>		<b>Disposal</b> Disposal By Lab <input checked="" type="checkbox"/> Archive For <u></u> Months		<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b> Return to Client <input type="checkbox"/> Disposal By Lab <input checked="" type="checkbox"/> Archive For <u></u> Months	
<b>Possible Hazard Identification</b> <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown		<b>Special Instructions/QC Requirements &amp; Comments:</b> <u></u>							
<b>Relinquished by:</b> <u>Mike Wagner</u> Relinquished on: <u>2/3/12</u> Relinquished at: <u>1230</u>		<b>Company:</b> <u>UES</u>		<b>Date/Time:</b> <u>2/3/12 12:30</u>		<b>Company:</b> <u>TestAmerica</u>		<b>Date/Time:</b> <u>2/3/12 12:30</u>	
<b>Relinquished by:</b> <u>Mike Wagner</u> Relinquished on: <u>2/3/12</u> Relinquished at: <u>13:45</u>		<b>Company:</b> <u>Test America</u>		<b>Date/Time:</b> <u>2/3/12 13:45</u>		<b>Company:</b> <u>Test America</u>		<b>Date/Time:</b> <u>2/3/12 13:45</u>	
<b>Relinquished by:</b> <u>Mike Wagner</u> Relinquished on: <u>2/3/12</u> Relinquished at: <u>13:45</u>		<b>Company:</b> <u>Test America</u>		<b>Date/Time:</b> <u>2/3/12 13:45</u>		<b>Company:</b> <u>Test America</u>		<b>Date/Time:</b> <u>2/3/12 13:45</u>	





**TestAmerica Cooler Receipt Form/Narrative**  
**North Canton Facility**

Lot Number: 8306

Client Duke Energy Project Duke MF By: [Signature]  
 Cooler Received on 2/4/12 Opened on 2/4/12 (Signature)

FedEx UPS DHL FAS Stetson Client Drop Off TestAmerica Courier Other \_\_\_\_\_  
 TestAmerica Cooler # 4039 Multiple Coolers \_\_\_\_\_ Foam Box \_\_\_\_\_ Client Cooler \_\_\_\_\_ Other \_\_\_\_\_

1. Were custody seals on the outside of the cooler(s)? Yes No Intact? Yes No NA  
 If YES, Quantity \_\_\_\_\_ Quantity Unsalvageable \_\_\_\_\_  
 Were custody seals on the outside of cooler(s) signed and dated? Yes No NA  
 Were custody seals on the bottle(s)? Yes No  
 If YES, are there any exceptions? \_\_\_\_\_
2. Shippers' packing slip attached to the cooler(s)? Yes No
3. Did custody papers accompany the sample(s)? Yes No Relinquished by client? Yes No
4. Were the custody papers signed in the appropriate place? Yes No
5. Packing material used: Bubble Wrap Foam None Other \_\_\_\_\_
6. Cooler temperature upon receipt 14.9 °C See back of form for multiple coolers/temps  
 METHOD: IR Other \_\_\_\_\_  
 COOLANT: Wet Ice Blue Ice Dry Ice Water None
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were sample(s) at the correct pH upon receipt? Yes No NA
10. Were correct bottle(s) used for the test(s) indicated? Yes No
11. Were air bubbles >6 mm in any VOA vials? Yes No NA
12. Sufficient quantity received to perform indicated analyses? Yes No
13. Was a trip blank present in the cooler(s)? Yes No Were VOAs on the COC? Yes No
- Contacted PM \_\_\_\_\_ Date \_\_\_\_\_ by \_\_\_\_\_ via Verbal Voice Mail Other \_\_\_\_\_  
 Concerning \_\_\_\_\_

**14. CHAIN OF CUSTODY**

The following discrepancies occurred:

High Temp OK for LHHG + Metals.

**15. SAMPLE CONDITION**

Sample(s) \_\_\_\_\_ were received after the recommended holding time had expired.  
 Sample(s) \_\_\_\_\_ were received in a broken container.  
 Sample(s) \_\_\_\_\_ were received with bubble >6 mm in diameter. (Notify PM)

**16. SAMPLE PRESERVATION**

Sample(s) \_\_\_\_\_ were further preserved in Sample  
 Receiving to meet recommended pH level(s). Nitric Acid Lot# 110410-HNO<sub>3</sub>; Sulfuric Acid Lot# 041911-H<sub>2</sub>SO<sub>4</sub>; Sodium  
 Hydroxide Lot# 121809 -NaOH; Hydrochloric Acid Lot# 041911-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-  
 (CH<sub>3</sub>COO)<sub>2</sub>ZN/NaOH. What time was preservative added to sample(s)? \_\_\_\_\_

Client ID	pH	Date	Initials

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.



## Login Sample Receipt Checklist

Client: Duke Energy Corporation

Job Number: 240-8306-1

Login Number: 8306

List Source: TestAmerica North Canton

List Number: 1

Creator: Maddux, Ann

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	14.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	